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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/760,289

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Chia-Yen Chai

BHT-3092-412

9849

7590

08/11/2004

BRUCE H. TROXELL

SUITE 1404

5205 LEESBURG PIKE

FALLS CHURCH, VA 22041

EXAMINER

HAMMOND, BRIGGITTE R

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/760,289

Applicant(s)

CHAI ET AL.

Examiner

Brigitte R. Hammond

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

KD

## DETAILED ACTION

### *Drawings*

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "12" and "13" have both been used to designate the same slot/hole. A proposed drawing correction or corrected drawings are required in reply to the Office action **to avoid abandonment of the application**. The objection to the drawings will not be held in abeyance.

### *Claim Objections*

Claims 1-9, are objected to because of the following informalities: in claim 1, line 1 change "the" to - -a- - , in line 2 change "the" to - -a- - , in line 4, before "contacts" insert - -of- - , in line 7, change the first occurrence of "the" to - -an- - , in line 13, delete the first occurrence of "the" and insert - -the- - after "through"; in claim 2, line 1 change "a teeth is" to - -teeth are- - or - -a tooth is- -; in claim 3, line 2, change "on" to - -one- -. For purposes of examination the Examiner shall use "teeth are" in claim 2.

Claims 3,6, and 9 are objected to because of the following informalities: in claims 3,6 and 9, applicant recites "said metal bodies". Claim 9 also recites "said teeth" and "the diameter". There is insufficient antecedent basis for these limitations in the claim. For purposes of examination the Examiner shall assume "metal shield" in claims 3,6 and 9 and "said fastener" for "said teeth" in claim 9.

Claim 4 is objected to because of the following informalities: in line 2, is the "a connecting slot" the same connecting slot of claim 1? Claim 4 also recites "said connectors", "the connecting side and the wiring side of the insulating body. There is

insufficient antecedent basis for these limitations in the claim. For purposes of examination the Examiner shall assume contacts instead of connectors.

Also in claim 4, it is unclear to the examiner how a connecting hole is on the connecting side of the connecting slot because the slot and the hole appears to be one in the same. For purposes of examination the Examiner shall assume the slot and the hole are one in the same.

Also in claims 1-9, Applicant uses the terms "said" and "the" interchangeably. Applicant needs to use one term or the other for consistency.

**Appropriate correction is required.**

**Note:** As a courtesy to the applicant, the examiner has "objected" to the claims.

However, In order to avoid a 35 USC § 112 rejection, appropriate correction is **required** in response to this office action.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al. 6,109,969 view Wilson 6,059,607. Kuo discloses an external high frequency connector with a connecting side to connect the corresponding connector and a wiring side to connect a high frequency cable to transmit electrical signals comprising: an insulating body 2 having a connecting slot 21 with a plurality contacts connecting to the

cable, a metal shield 5 external to said insulating body having a protruding part 55 connecting to the electrical ground is on the connecting side of said metal shield, a positioner 512 wedging the cable stretches out to the wiring side, said positioner 512 has two wedges ( partially shown in fig. 1) that wrap the cable vertically; an external packaging 6 covers some portion of the insulating body; such that said metal shield, the cable and said protruding part discharges electrical charges through the electrical ground for higher transmission quality, said wedges of said positioner stabilize the cables from sway for better mechanical strength. Kuo et al. do not disclose a fastening hole and a fastener on each end of a wedge stabilize the cables from sway for better mechanical strength. However, wedges having a fastening hole and a fastener that stabilize the cables from sway for better mechanical strength are well known in the art as evidenced by Wilson 6,059,607. Wilson discloses a metal shield 38 with a positioner 60 with two wedges 62,64 that wrap the cable vertically, each wedge having a fastening hole and a fastener (see attachment A) on each end of the wedge to stabilize the cables from sway for better mechanical strength. Therefore, it would have been obvious to one of ordinary skill to modify the connector of Kuo by having a fastening hole and a fastener on each end of a wedge stabilize the cables from sway as taught by Wilson for better mechanical strength.

Regarding claim 7, said metal shield 5 consists of two metal bodies.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Wilson as applied to claim 1 above, and further in view of Wu 6641,429. Neither Kuo nor Wilson disclose teeth on both sides of the fastener. However teeth on both sides of

a fastener is well known in the art as evidenced by Wu. Wu discloses a positioner 30 having teeth 35 on both sides of the fasteners 34. Therefore, it would have been obvious to one of ordinary skill to modify the connector of Kuo modified by Wilson by having having teeth on both sides of the fastener portions for an interference fit as taught by Wu.

Claims 3-5,8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Wilson as applied to claim 1 above, and further in view of Davis 5,518,421. Regarding claim 3, Kuo and Wilson disclose the invention substantially as claimed. Neither Kuo nor Wilson disclose convexities are on the insulating body and at least one through hole corresponding to the convexities on said metal shield. However, Davis discloses at least one convexity 34 the insulating body and at least one through hole 50 corresponding to the convexity on the metal shield, the shield and the insulating body are combined with the convexities passing through the through holes. Therefore it would have been obvious to one of ordinary skill to modify the connector of Kuo modified by Wilson by having at least one convexity on the insulating body and at least one through hole on the metal shield corresponding to the convexity for securing the connect as taught by Davis.

Regarding claim 4, Kuo and Wilson disclose the invention substantially as claimed. Kuo discloses the insulating body has a connecting slot 21 to install said contacts and a connecting section and a wiring section separated by divider 3. Neither Kuo nor Wilson disclose a guiding convex corresponding to the corresponding connector. However a guiding convex corresponding to the corresponding connector is

well known in the art. Davis discloses a connector having a shield 37,38 and an insulating body 1 having a guiding convex 35. Therefore, it would have been obvious to one of ordinary skill to modify the connector of Kuo modified by Wilson by having a guiding convex to identify direction as taught by Davis.

Regarding claim 5, the method of forming the packaging is not germane to the issues of patentability of the device itself and does not differentiate from the finished product and would have been an obvious choice to one of ordinary skill. Therefore, this limitation has been given little patentable weight.

Regarding claim 8, Kuo and Wilson disclose the invention substantially as claimed. Kuo discloses the metal shield having sidewalls that correspond to the insulating body. However, neither Kuo nor Wilson disclose the metal shield having pairs of metal body fastening slots and metal body fasteners on said sidewalls. However, Davis discloses a metal shield 38,36 having pairs of metal body fastening slots 50,61 and metal body fasteners 49 on said sidewalls to fix two said metal bodies together.

Regarding claim 9, Wilson discloses the wedges of the positioner are bent along the diameter of the cable, the fastening hole and the fastener on the end of said wedges are fastened together, the combination of the fastener and the fastening holes position the cable and the shield.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Wilson as applied to claim 1 above, and further in view of Davis et al. 4,457,755. Kuo and Wilson disclose the invention substantially as claimed. Neither Kuo nor Wilson disclose at least one gripping hole on said metal shield. However, Davis et al.

4,457,755 discloses a connector having a shield 48 and an insulating body 20 wherein the metal shield has at least one gripping hole on said metal shield (col. 3, lines 30-40). It would have been obvious to one of ordinary skill to modify the connector of Kuo modified by Wilson by providing the shield with at least one gripping hole for retaining purposes as taught by Davis et al.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Asick et al. 5,199,903, Wu 6,007,385, Karir 6,017,245, Chen et al. 6,609,934, Kuo 6,165,017, Marsh et al. 5,380,223 were cited as similar high frequency connectors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brigitte R. Hammond whose telephone number is 571-272-2006. The examiner can normally be reached on Mon.-Thurs. and Alternate Fridays from 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A Bradley can be reached on 571-272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brigitte R. Hammond

August 5, 2004

A handwritten signature in black ink, appearing to read "Brigitte R. Hammond", written in a cursive style.